

Remarks/Arguments

Claims 1-30 are pending. In the non-final Office Action mailed on March 7, 2007, the Examiner rejected claims 1-30 under 35 USC §101 because the claimed invention is directed to non-statutory subject matter. The Examiner rejected claims 1-9, 11-19, and 21-29 under 35 USC §102(e) as anticipated by Wang (U.S. Patent Publication No. 2004/0225773). The Examiner rejected claims 10, 20 and 30 under 35 USC §103(a) as unpatentable over Wang in view of Dorfman (U.S. Patent No. 5,960,164).

Applicants amended various claims for editorial clarity and to better protect the invention. Particularly, Applicants amended claim 1 to change the step of receiving source data to the step of receiving a print job including page content of the impositioned document. Applicants added to claim 1 the step of creating a first imposition layout of the impositioned document based on the page content. Applicants amended the step of receiving a job ticket in claim 1 to indicate that the job ticket is a first job ticket, and to further include that the first job ticket includes an impositioning layout of the resource in the impositioned document. Applicants added the step of determining whether the resource is locally stored on a printing device. Applicants amended the storing step of claim 1 to indicate that it is performed responsive to determining that the resource is not locally stored on the printing device. Applicants amended the printing step of claim 1 to state that the impositioned document is printed using the locally stored resource. Applicants also added to claim 1 the steps of receiving a second job ticket referencing the identifier of the resource in the impositioned document and printing the impositioned document based on the second job ticket using the resource locally stored on the printing device. Applicants made similar amendments to claims 11 and 21. Applicants amended various dependent claims to match the language of the independent claims. Support for these amendments may be generally found on pages 5-10 of the specification.

Applicants respectfully traverse the rejections and request withdrawal thereof.

35 USC §101 Rejection

The Examiner rejected claims 1-30 under 35 USC §101, asserting that the claimed invention is directed to non-statutory subject matter. The Examiner stated that the invention is directed to an apparatus which comprises only software with minimal hardware, executing a method of data manipulation that does not occur outside of memory. Thus, the Examiner stated

that there is not a real, concrete, and tangible result. Applicants respectfully disagree.

Claim 11 recites an apparatus including means for printing a stored resource according to layout information. Printing refers to placing information (such as an image) on a sheet of paper (or other medium). Printing utilizes a physical device to place ink or other substances on the paper to form the image. Thus, Applicants submit that the Apparatus comprises more than just software with minimal hardware. Further, the Apparatus receives page content, performs operations on the page content, and prints the page content to paper. Therefore, Applicants submit that the apparatus does more than just execute a method of data manipulation within memory.

Additionally, the Examiner asserts that the invention does not produce a real, concrete and tangible result. The Examiner states that the specification itself claims a memory structure, which the Examiner asserts is non-statutory material as well. Applicants respectfully point out that the claims don't recite a memory structure, and the claims are what define the invention, not the specification. Claims 1-10 are directed at a method, which is a new and useful process under 35 USC §101. Claims 11-20 are directed at an apparatus, which is a new and useful machine and/or article of manufacture under 35 USC §101. Claims 21-30 are directed at a computer-readable medium tangibly embodying at least one program of instructions executable by a computer, which is a new and useful article of manufacture under 35 USC §101.

Further, the apparatus, method and computer-readable medium claims all recite printing a stored resource (e.g., an impositioned document). This results in a printed document, which is useful, concrete, and tangible. Thus, because the invention produces a useful, concrete and tangible result, Applicants submit that the invention is directed to statutory subject matter. Applicants respectfully reconsideration and withdrawal of the 35 USC §101 rejection of claims 1-30.

35 USC §102 and §103 Rejections

The Examiner rejected claims 1-9, 11-19, and 21-29 under 35 USC §102(e) as anticipated by Wang. The Examiner rejected claims 10, 20 and 30 under 35 USC §103(a) as unpatentable over Wang in view of Dorfman. The 35 USC §102 and §103 rejections are traversed because Wang does not teach the apparatus, method and computer-readable medium of the present claims. The rejections will be discussed in terms of amended independent claim 1.

At least one limitation of amended claim 1 not disclosed by Wang is "creating a first imposition layout of the impositioned document based on the page content". Impositioning refers to the process by which multiple pages are printed on a single sheet of paper in a particular order so that they come out in the correct sequence when cut and folded. The present method includes creating the imposition layout of the document based on the page content (e.g., which direction each resource is flipped). Wang's invention is directed to general printing, and does not explicitly disclose the limitation of creating an imposition layout as recited by amended claim 1.

Another limitation of amended claim 1 not disclosed by Wang is "receiving a first job ticket generated from the page content, the first job ticket including an identifier identifying a resource included in the impositioned document and layout information describing the first imposition layout of the resource in the impositioned document". The Examiner states that Wang discloses an application which creates an output file. The Examiner also asserts that Wang discloses a print file, or "job ticket", which comprises a document including a resource, a specific font and its individual characters, and the positioning of each character on the page. The Examiner thus asserts that Wang's invention discloses generating a job ticket.

Applicants respectfully disagree. The Examiner is asserting that a print file or output file is a job ticket. However, the print file (e.g., the actual document text) is not a job ticket. Rather, the job ticket is information which gives instructions as to how the source data (e.g., the actual document text) is to be printed. Applicants see no explicit enumeration in Wang of generating a job ticket.

Further, as discussed above, Wang does not disclose imposition printing. Therefore, assuming, *arguendo*, that Wang discloses generating a job ticket, any job ticket disclosed by Wang would not include impositioning layout information regarding an impositioned document. Therefore, Applicants submit that Wang does not teach generating a job ticket including an imposition layout of a resource in an impositioned document.

Another limitation of amended claim 1 not disclosed by Wang is "printing the impositioned document based on the first job ticket using the resource locally stored on the printing device". Applicants submit that Wang does not teach printing impositioned documents, or utilization of a job ticket as discussed above, and thus, does not teach the recited limitation.

Additional limitations of amended claim 1 not disclosed by Wang are "receiving a second job ticket referencing the identifier of the resource in the impositioned document", and "printing

the impositioned document based on the second job ticket using the resource locally stored on the printing device". The present method operates to persistently store a resource locally on a printing device when a first print job and a first job ticket are submitted to the printing device. Thus, when a second print job and/or second job ticket is received which references the resource, the locally stored resource may be used by the printing device to print the second print job.

By contrast, Wang teaches a system which allows for the printing of arbitrary font data (i.e., fonts which are not resident on a printer) (see Abstract of Wang). In response to determining that a utilized font is not resident on a printer, a software application of Wang renders bitmap data of a character which is transmitted to the printer for printing of the print job (paragraph 0040 of Wang). Wang does not disclose that such bitmap data of a character is stored once the print job is complete, and utilized for printing of future print jobs.

The Examiner states on page 7 of the Office Action that Wang's invention operates on a job-by-job basis. The Examiner further states that after a first job utilizing a nonresident font is printed, by virtue of the invention, the nonresident font has been stored in the printer and becomes a resident font. The Examiner thus asserts that a subsequent job utilizing the same font would execute in the same manner as disclosed with a resident font. Applicants respectfully disagree.

The Examiner is correct the Wang's invention operates on a job-by-job basis. However, there is no indication in Wang that once a character is transmitted to a printer that the bitmap data of the character is saved for future use. First, Wang discloses that many printers are not configured to store and use large font sets (see paragraph 0008 of Wang). Wang's invention is thus directed at a system which allows printers to receive arbitrary font data such that the devices don't need to save large font sets (see paragraphs 0009 and 0010 of Wang). Saving any arbitrary font printed for future use would quickly fill up a printer's memory, and would essentially cause the same problems Wang is trying to solve, and negate the advantages that Wang's invention provides.

Further, there is no indication that bitmap data of Wang used for an arbitrary font could be utilized for future use. FIG. 6 of Wang discloses a data structure for a non-printer resident font (paragraph 0026 of Wang). In comparison, FIG. 5 of Wang illustrates a data structure used for printer resident fonts, which includes a font ID field identifying a particular type of font (paragraph 0025 of Wang). By comparison, the data structure of FIG. 6 does not include a font

ID field for identifying the particular font associated with the character data. Therefore, the printer could not associate the character data with a reference to a font in the future while printing another print job. Instead, the arbitrary font data would need to be re-transmitted to the printer. Thus, Applicants submit that the limitations relating to the printing of a second print job using the locally stored resource are not disclosed by Wang.

In view of the claimed features previously discussed, the present method is submitted to be novel and also unobvious over Wang. These same arguments apply to independent claim 11, an apparatus with functionality similar to the method of independent claim 1, and claim 21, a computer-readable medium tangibly embodying at least one program of instructions executable by a computer for executing the method of claim 1. These same arguments apply to dependent claims 2-10, 12-20, and 22-30. In addition, claims 2-10, 12-20, and 22-30 recite additional limitations not disclosed by Wang. Applicants respectfully request reconsideration and withdrawal of the rejections.

Conclusion

Applicants have amended various claims. These claims are believed to be distinguished over the prior art of record. Applicants have traversed the Examiner's rejections, and Applicants therefore respectfully request reconsideration and withdrawal of the rejections under 35 USC §101, 35 USC §102(e), and 35 USC §103(a).

Applicants believe no fees are due in this matter. Should any issues remain, the Examiner is encouraged to telephone the undersigned attorney.

Respectfully submitted,

Date: 5/30/2007

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